

Attorney Docket No.: J3715(C)
Serial No.: 10/550,622
Filed: August 3, 2006
Confirmation No.: 4634

REMARKS

The subject amendment is submitted in a good faith effort to advance the prosecution of the subject application. Entry thereof is respectfully requested.

Claim 1 has been amended to further describe the surfactant component of the silicone pressure sensitive adhesive emulsion as being selected from the group consisting of anionic surfactants, non-ionic surfactants, and blends thereof. See, for example, page 10, lines 6 to 13. Claim 1 has been further amended to describe the emulsion as being free of silicone-based solvents. See, for example page 10, lines 15 to 17. Claim 5 has been amended to specify that said the surfactant component of the silicone pressure sensitive adhesive emulsion is selected from the group consisting of anionic surfactants and blends of anionic and non-ionic surfactants. New claim 18, depending on claim 1, further describes the pressure sensitive adhesive as comprising a silicone fluid and a silicate. See, for example, page 4, lines 14 to 27. New claim 19 follows the format of previously presented claim 15, but depends from claim 1.

Pursuant to the referenced Office Action claims 1, 4-5, 8, 10, 11 and 13 were rejected under 15 U.S.C. 103(a) over Clapp (US 6,887,859); claims 1, 4-5, 10, 13, and 15-17 were rejected under 35 U.S.C. 103(a) over Dhamdhare et al (US 6,787,130) in view of Tongerson (US 6,1565,455); claims 1, 4-5, 8, 10, 11 and 13 were provisionally rejected on the ground of non-statutory obviousness-type double patenting over claims 1-11 of co-pending Application No. 10/550623; and claims 1, 4-5, 8, 10, 11, 13, and 15-17 were rejected over claims 1-11 of Dhamdhare in view of Torgerson et al. (US 6,165,455). These rejections are respectfully traversed.

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The subject invention is directed to leave-on hair styling mousses and, as described in claims 16 to 19, hair styling mousses wherein if styling polymer is present, it is present in an amount below 0.01 wt% of the described compositions, which mousses have been found to provide desirable style retention while minimizing the stickiness and stiffness common to many styling mousses containing conventional styling polymers. Pursuant the subject invention it was found that the inclusion into mousse compositions of a pre-formed aqueous emulsion which is a mixture of a silicone pressure sensitive adhesive and a hydrocarbon-containing non-silicone organic solvent, which mixture has been emulsified in water using one or more surfactants selected from the group consisting of anionic and non-ionic surfactants, provides mousse compositions having desirable hold. Moreover, the inclusion of such emulsions enables formulators to eliminate or substantially reduce the amount of conventional styling polymer, to provide compositions having both desirable hold and sensory properties, and which leave the hair feeling non-sticky. Further the incorporation of the subject pressure sensitive adhesive as a particular preformed emulsion (i.e., a mixture of silicone pressure sensitive adhesive and hydrocarbon-containing organic solvent that has been emulsified in water using one or more anionic and/or non-ionic surfactants) has been found to provide mousse compositions wherein the tendency of the pressure sensitive adhesive to hydrolyze is reduced and styling performance, in particular curl retention, is improved.

Table 1 of the subject application includes a description of various pre-formed pressure-sensitive adhesive (PSA) emulsions including the emulsion identified as DC[®] 5-7300 183930-45 as well as DC[®] 5-7200 17724-65-A. Both emulsions have equivalent resin: polymer ratios and an anionic emulsifier. In DC[®] 5-7300 183930-45 the solvent is identified as isododecane, a hydrocarbon solvent (pressure sensitive adhesive: solvent ratio of 40:60); in DC[®] 5-7200 17724-65-A the solvent is identified

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as 1 cst PDMS, (pressure sensitive adhesive: solvent ratio of 60:40). The performance such emulsions in a mousse formulation is described and compared at pages 37 to 38 of the subject application; the mousse formulation wherein the solvent component of the PSA emulsion was isododecane (Example 4) was found to provide better curl retention than the mousse formulation in which the solvent was a silicone based solvent (Example C). Moreover, Example 4 was found to provide better curl retention than Example B, an otherwise identical composition in which the PSA emulsion is replaced by an equivalent amount (on a % active ingredient basis) of a conventional styling polymer identified as copolymer of 3-methyl-1-vinyl-1H-imidazolium chloride and 1-vinyl-2-pyrrolidone). Thus the subject inventors found that in styling mousse formulations, solvent selection has a real and critical effect on the styling performance of a pressure sensitive adhesive emulsion.

As noted in prior responses, Clapp is directed to the use of a pressure sensitive adhesive in body powder formulations to improve the adhesion of the fluid absorbing powders to the skin and provide compositions that are disclosed as having "extended wear". Basically, the pressure sensitive adhesive keeps the powder adhered to the skin. The "consisting essentially of" language introduced to amended claim 1 was provided to distinguish over the absorbent powder-containing formulations of Clapp. It is respectfully submitted that the combination of fluid absorbing material and pressure sensitive adhesive (particularly a composition that has been formulated to improve powder adhesion) is not desirable in a leave-on styling mousse. More particularly, Clapp's combination of fluid absorbing material and pressure sensitive adhesive would be reasonably expected by one skilled in the art to detract from combability, clean feel, body and other sensory properties needed for styling mousse applications, as well as interfere with the hold or film-forming properties of the mousse itself. Moreover, the fluid forming absorbing material would

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be expected to have a significant anti-foaming effect in a mousse composition. **It is respectfully submitted that Clapp can not be reasonably interpreted as disclosing compositions suitable for use in hair styling applications. Moreover, there is nothing in Clapp that discloses or suggests the criticality of solvent selection on PSA emulsion performance.** While volatile hydrocarbons (including isododecane) are described as being among the liquid carriers suitable for topical application to the skin, silicones are also disclosed as suitable carriers. See, for example, column 8, line 59 to column 9, line 40. Moreover, there is nothing in Clapp that discloses or suggests the addition of the PSA as a pre-formed emulsion, or the benefits thereof in mousse applications.

Like Clapp, Dhamdhere too fails to disclose or suggest the criticality of solvent selection on the performance of a pressure sensitive adhesive in hair mousse formulations. The citation's exemplified compositions are conditioners, shampoos and, as described in Example 14, a suspension composition. Hair treatment mousses are not exemplified. Dhamdhere discloses that the PSA can be in solution or emulsion form. The PSA emulsion employed in the compositions is described as a low tack silicone PSA emulsion available from Dow Corning Corp. (DC 5 -7300) which is described as a 40% emulsion of silicone PSA that contains 65% silicone resin and 35% silicone polymer. The solvent is not specifically identified. However, at column 4, line 64 to column 5, line 10, Dhamdhere discloses that the preferred PSA emulsions are prepared by **mixing the silicone PSA in volatile silicone fluid**. See column 4, line 64 to column 5, line 10.

There is nothing in Torgerson et al. that discloses or suggests the use of preformed silicone emulsions as described by the subject claims or that otherwise cures the deficiencies of Clapp or Dhamdhere.

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With respect to the provisional obviousness-type double patenting rejections, for the reasons given above, it is respectfully submitted that the subject claims patentably distinguish over Dhamdhere in combination with Torgerson et al.

Regarding the rejection over co-pending Application No. 10/550623, Applicants note that this rejection is provisional only. Both applications are under prosecution and their claims subject to possible amendment. Upon the indication of otherwise allowable subject matter, Applicant reserves the right to revisit the merits of such rejection, compare claims and, if necessary to file a terminal disclaimer over same. Comparing the claims in their current form, it is respectfully submitted that the instant claims are patentably distinguishable over those of co-pending 10/550623.

In view of the comments set forth above reconsideration and allowance of the subject claims as hereby amended is respectfully requested.

Respectfully submitted,



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